

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: **UT-0037**

Inventors: **Rao and Mayer-Proschel**

Serial No.: **Not yet assigned**

Filing Date: **Herewith**

Examiner: **Not yet assigned**

Group Art Unit: **Not yet assigned**

Title: **Generation, Characterization and Isolation of Neuroepithelial Stem Cells and Lineage Restricted Intermediate Precursor**

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By Kathleen A. Tyrrell  
Typed Name: **Kathleen A. Tyrrell**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

**Preliminary Amendment**

Please enter the following amendment into the record.

**In the Specification:**

At page 1, following the title, please insert the following paragraph:

-- This application is a continuation of U.S. Patent Application Serial No. 08/852,744, filed May 7, 1997. --

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**In the Claims:**

Please cancel claims 1-20, without prejudice.

Please add the following new claims:

33. An isolated, pure, homogeneous population of mammalian neuroepithelial stem cells derived from the neural tube from a mammalian embryo at a stage of embryonic development after closure of the neural tube which require fibroblast growth factor for proliferation and self-renewal and which differentiate into CNS neuronal cells and CNS glial cells, comprising oligodendrocytes, A2B5-positive astrocytes and A2B5-negative astrocytes.

34. An isolated, pure, homogeneous population of mammalian glial-restricted precursor cells derived from a neural tube from a mammalian embryo at a stage of development after closure of the neural tube, wherein said glial-restricted precursor cells self-renew in adherent feeder-cell-independent culture medium and differentiate into CNS glial cells, comprising oligodendrocytes, A2B5-positive astrocytes, and A2B5-negative astrocytes, but do not respond to PDGF by differentiating into CNS neuronal cells. --

**REMARKS**

Claims 1-32 are pending in the instant application. Claims 1-20 have been canceled, without prejudice. New claims 33 and 34

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drawn to an isolated, pure, homogeneous population of mammalian neuroepithelial stem cells derived from the neural tube from a mammalian embryo and an isolated, pure, homogeneous population of mammalian glial-restricted precursor cells derived from a neural tube from a mammalian embryo have been added. Support for claims drawn to mammalian cells is provided throughout the entire specification. Thus, no new matter has been added.

Further, in the course of the prosecution of a continuation-in-part application (U.S. Application Serial No. 09/073,881) of the same parent from which this continuation application derives, the developmental stages for mammalian neural tube closure have been recognized as being well known in the art. Accordingly, one of skill in the art can routinely use exemplary methods taught in the instant specification for rat neural epithelial neuroepithelial stem cells and rat glial-restricted precursor cells to obtain other mammalian neuroepithelial stem cells and glial-restricted precursor cells exhibiting identical characteristics under the same culture conditions as those taught for the exemplary rat cells.

In addition, new claims 33 and 34 contain similar language to that allowed in the parent application.

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Entry of this amendment is therefore respectfully requested.

Respectfully submitted,

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Date: **December 19, 2001**

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